

**PATENT COOPERATION TREATY**  
**PCT**  
**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter II of the Patent Cooperation Treaty)  
(PCT Article 36 and Rule 70)

REC'D 07 FEB 2006

PCT

Applicant's or agent's file reference 12697PC2-PJD/AM	<b>FOR FURTHER ACTION</b>	See Form PCT/IPEA/416
International application No. <b>PCT/AU2005/000123</b>	International filing date ( <i>day/month/year</i> ) 1 February 2005	Priority date ( <i>day/month/year</i> ) 2 February 2004
International Patent Classification (IPC) or national classification and IPC  Int. Cl. <b>B60B 21/06 (2006.01)</b>		
Applicant <b>VELOCITY BICYCLE ACCESSORIES PTY LTD et al</b>		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 3 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
  - a. ☒ (*sent to the applicant and to the International Bureau*) a total of 3 sheets, as follows:
    - ☐ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
    - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
  - b. ☐ (*sent to the International Bureau only*) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or table related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the report
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application

Date of submission of the demand 1 September 2005	Date of completion of this report 27 January 2006
Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929	Authorized Officer  <b>KURT TOBLER</b> Telephone No. (02) 6283 2469

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/AU2005/000123

## Box No. I Basis of the report

1. With regard to the **language**, this report is based on:

☒ The international application in the language in which it was filed

☐ A translation of the international application into  
translation furnished for the purposes of:

, which is the language of a

☐ international search (under Rules 12.3(a) and 23.1 (b))

☐ publication of the international application (under Rule 12.4(a))

☐ international preliminary examination (Rules 55.2(a) and/or 55.3(a))

2. With regard to the **elements** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

☐ the international application as originally filed/furnished

☒ the description:

pages **1-29** as originally filed/furnished

pages\* received by this Authority on with the letter of

pages\* received by this Authority on with the letter of

☒ the claims:

pages as originally filed/furnished

pages\* as amended (together with any statement) under Article 19

pages\* **30-32** received by this Authority on **2 December 2005** with the letter of the same.

pages\* received by this Authority on with the letter of

☒ the drawings:

pages **1-20** as originally filed/furnished

pages\* received by this Authority on with the letter of

pages\* received by this Authority on with the letter of

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages

☐ the claims, Nos.

☐ the drawings, sheets/figs

☐ the sequence listing (*specify*):

☐ any table(s) related to the sequence listing (*specify*):

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

☐ the description, pages

☐ the claims, Nos.

☐ the drawings, sheets/figs

☐ the sequence listing (*specify*):

☐ any table(s) related to the sequence listing (*specify*):

\* If item 4 applies, some or all of those sheets may be marked "superseded."

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/AU2005/000123

**Box No. V** Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims 1-24	YES
	Claims	NO
Inventive step (IS)	Claims 1-24	YES
	Claims	NO
Industrial applicability (IA)	Claims 1-24	YES
	Claims	NO

## 2. Citations and explanations (Rule 70.7)

The claims, as amended, are novel and inventive over the prior art as none of the citations disclose a wheel rim having a track capable of being operatively coupled to respective ends of at least two spokes.

Therefore the subject matter of these claims is new and meets the requirements of Article 33(2) PCT with regard to novelty.

Therefore the subject matter of these claims is not obvious and meets the requirements of Article 33(3) PCT with regard to inventive step.

CLAIMS

1. A wheel rim comprising:
  - (a) a circular band; and
  - (b) at least one track located on the circular band capable of being
- 5 operatively coupled to respective ends of at least two spokes.
2. The wheel rim of claim 1 wherein the end of the spokes are capable of sliding relative to the track.
3. The wheel rim of claim 1 wherein the track comprises a groove capable of receiving and retaining a plurality of carriages operatively coupled
- 10 to respective ends of the spokes.
4. The wheel rim of claim 3 wherein each carriage is operatively coupled to a threaded end of the spoke(s).
5. The wheel rim of claim 4 wherein each carriage comprises a spoke nipple.
- 15 6. The wheel rim of claim 3 wherein each carriage is operatively coupled to a non-threaded end of the spokes.
7. The wheel rim of claim 6 wherein the non-threaded end of the spokes comprises a hook or flat head.
8. The wheel rim of claim 2 wherein the track comprises a bar
- 20 adapted to retain the end of the spokes.
9. The wheel rim of claim 8 wherein the bar is adapted to retain a hook end of the spokes.
10. The wheel rim of claim 4 wherein each carriage is operatively coupled to a spoke nipple.

11. The wheel rim of claim 2 wherein the track comprises an outward extension capable of operatively coupling to a carriage.
- 12 The wheel rim of claim 11 wherein outward extension comprises a T-shape capable of mating with the carriage.
- 5 13. The wheel rim of claim 1 wherein the track is located on an inner surface of the circular band.
14. The wheel rim of any one of claims 1 wherein the track comprises at least one channel located on each of two opposed side surfaces of the circular band.
- 10 15. The wheel rim of claim 4 comprising a spacer carriage locatable on the track between adjacent carriages operatively coupled to a spoke nipple.
16. The wheel rim of claim 4 wherein the plurality of carriages are operatively coupled to a strip.
- 15 17. The wheel rim of claim 4 wherein the plurality of carriages are operatively coupled to the strip by an adhesive.
19. The wheel rim of any one of claims 1 wherein the circular band comprises a channel located on an outer surface adapted to retain a tire.
20. A wheel comprising:
- 20 (1) a rim comprising:
- (i) a circular band; and
- (ii) at least one track located on the circular band;
- (2) a plurality of spokes operatively coupled to the track and extending inwardly from the rim; and

(3) a hub located central of the wheel and operatively coupled to the rim by said plurality of spokes.

21. A method for operatively coupling a plurality of spokes to a wheel rim, including the step of operatively coupling ends of a plurality of  
5 spokes to a track located on an inner surface of a circular band of the rim, wherein the end of the spokes when operatively coupled to the track are slidable relative thereto.

22. The method of claim 21 further including the step of operatively coupling the spoke to the carriage via a spoke nipple and operatively  
10 coupling the carriage to the track.

23. The method of claim 22 further including the step of attaching one or more spacer carriages to the track between adjacent carriages.

24. The method of claim 23 further including the step of attaching an opposite end of the spoke not attached to the carriage to a hub.